

**II. REMARKS**

**A. Status of the claims**

Claims 1-3 and 5-11 are pending in this application. Claim 4 was cancelled. Claim 1 is amended herein. Support for the amendment is found in the specification on page 3, lines 1-8. Claim 2 is amended herein. Support for the amendment is found in the specification on page 5, lines 19-21. No new subject matter was added. The dependency of claims 7 and 8 has been corrected.

New claims 10-11 are added. Support for these new claims is found in the specification on page 3, lines 16 to 20. No new subject matter was added.

**B. Objection to the specification**

On page 5, line 16, the term “sepharose” is replaced with the term --Sepharose--. No new subject matter was added.

**C. 35 U.S.C. §112 Second Paragraph Rejections**

Claims 1-9 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant respectfully traverses for at least the following reasons.

1. Claim 1 is amended to more clearly claim that the ionic component is bound selectively to the ionic adsorbent in the absence of an added second ionic component that competitively binds the adsorbent.
2. Claim 2 is amended to more clearly claim that the ionic adsorbent is a cation-exchange adsorbent.
3. The dependency of claims 7 and 8 are corrected.

**D. 35 U.S.C. §102 Rejections**

1. Claims 1-2, 5-7 and 9 are rejected under 35 U.S.C. §102 (b) as allegedly anticipated by Scholz, G.H. et al., "Salt-independent Binding of Antibodies from Human Serum to Thiophilic Heterocyclic Ligands", *J. Chromatography B: Biomedical Sciences & Applications*, 709:189-196, 1998, (hereinafter, "Scholz"). Applicant respectfully traverses for at least the following reasons.

The standard for anticipation is one of strict identity and "the reference must teach every aspect of the claimed invention either explicitly or inherently." (MPEP §706.02 IV, lines 6-7) Additionally, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); MPEP §2131.

Claim 1 requires, at least in part, a method of separating a selected ionic component from a sample wherein the charge density of the ionic adsorbent is 10 to 100 µmol/ml.

Applicant respectfully contends that Scholz fails to teach a method of separating a selected ionic component from a sample wherein the charge density of the ionic adsorbent is 10 to 100 µmol/ml.

Applicant respectfully contends that dependent claims 2, 3 and 5-12, which depend on claim 1, are also not anticipated since Scholz fails to teach each and every element as set forth in claim 1. As such, Applicant respectfully contends that at least for these reasons, the anticipatory rejection has been rebutted and the rejection should be withdrawn.

2. Claims 1-3, 6 and 9 are rejected under 35 U.S.C. §102 (b) as allegedly anticipated by DePhilips. P. et al., "Determinants of Protein Retention Characteristics on Cation-Exchange Adsorbents", *J. Chromatography A*, 933 (1-2):52-72, November 9,

2001, (hereinafter, "DePhilips"). Applicant respectfully traverses for at least the following reasons.

Claim 1 requires, at least in part, a method of separating a selected ionic component from a sample wherein the charge density of the ionic adsorbent is 10 to 100 µmol/ml.

Applicant respectfully contends that DePhilips fails to teach a method of separating a selected ionic component from a sample wherein the charge density of the ionic adsorbent is 10 to 100 µmol/ml.

Applicant respectfully contends that dependent claims 2, 3, 6 and 9 which depend on claim 1, are also not anticipated since DePhilips fails to teach each and every element as set forth in claim 1. As such, Applicant respectfully contends that at least for these reasons, the anticipatory rejection has been rebutted and the rejection should be withdrawn.

3. Claims 1, 2, 4 and 9 are rejected under 35 U.S.C. §102 (b) as allegedly anticipated by Wu, D. et al., "Effects of Stationary Phase Ligand Density On High-performance Ion-exchange Chromatography of Proteins", Journal of Chromatography 598, 7-13, 1992, (hereinafter, "Wu"). Applicant respectfully traverses for at least the following reasons.

The standard for anticipation is one of strict identity and "the reference must teach every aspect of the claimed invention either explicitly or inherently." (MPEP §706.02 IV, lines 6-7) Additionally, "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987); MPEP §2131.

Claim 1 requires, at least in part, a method of separating a selected ionic component from a sample by contacting the sample with an ionic adsorbent whose charge density is such that the ionic component is bound selectively to the ionic

adsorbent in the absence of an added second ionic component that competitively binds the adsorbent, wherein the charge density of the ionic adsorbent is 10 to 100  $\mu\text{mol}/\text{ml}$ .

Applicant respectfully contends that Wu fails to teach a method of separating a selected ionic component from an adsorbent in the absence of an added second ionic component that competitively binds the adsorbent. Wu teaches the effects of stationary phase ligand density on high-performance ion-exchange chromatography of ionic components from a sample in the presence of an added second ionic component (e.g.  $\text{Na}^+$  salts) that competitively binds the adsorbent. (pages 8-9)

Applicant respectfully contends that dependent claims 2, 4 and 9 which depend on claim 1, are also not anticipated since Wu fails to teach each and every element as set forth in claim 1. As such, Applicant respectfully contends that at least for these reasons, the anticipatory rejection has been rebutted and the rejection should be withdrawn.

4. Claims 1-3 and 5-9 are rejected under 35 U.S.C. §102 (b) as allegedly anticipated by US Pat. No. 5,644,036 to Ramage et al. (hereinafter, "Ramage"). Applicant respectfully traverses for at least the following reasons.

Claim 1 requires, at least in part, a method of separating a selected ionic component from a sample wherein the charge density of the ionic adsorbent is 10 to 100  $\mu\text{mol}/\text{ml}$ .

Applicant respectfully contends that Ramage fails to teach a method of separating a selected ionic component from a sample wherein the charge density of the ionic adsorbent is 10 to 100  $\mu\text{mol}/\text{ml}$ .

Applicant respectfully contends that dependent claims 2, 3, and 5-9 which depend on claim 1, are also not anticipated since Ramage fails to teach each and every element as set forth in claim 1. As such, Applicant respectfully contends that at least for these reasons, the anticipatory rejection has been rebutted and the rejection should be withdrawn.

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Reply to Office Action of May 14, 2007

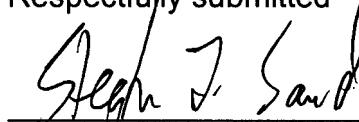
**E. Art of Interest**

Applicant acknowledges the art made of record and not relied upon in the Office Action.

**III. CONCLUSION**

In view of the foregoing remarks, Applicant respectfully requests the reconsideration and withdrawal of the rejections, and the timely allowance of the pending claims. Applicant believes that the above response is a complete response to the present office action. If however the Examiner believes that some requirement has been missed or not completely answered, the Examiner is invited to contact Applicant's attorney at the number below. Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account.

Respectfully submitted



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The undersigned hereby certifies that this document is being placed in the United States mail with first-class postage attached, addressed to Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on November 14, 2007.

  
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Stacey Gross